

GenCore version 5.1.4_p5_4578
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OM protein - protein search, using sw model

Run on: March 17, 2003, 07:19:15 ; Search time 28.0916 Seconds
(without alignments)
234.715 Million cell updates/sec

Title: US-09-787-082-7

Perfect score: 188
Sequence: 1 GLPVCKGKGAKCSRLMYDCTGSCRSRGKTRG 32

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues
Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_21.*

- 1: sp_archaea.*
- 2: sp_bacteria.*
- 3: sp_fungi.*
- 4: sp_human.*
- 5: sp_invertebrate.*
- 6: sp_mammal.*
- 7: sp_mhc.*
- 8: sp_organelle.*
- 9: sp_phage.*
- 10: sp_plant.*
- 11: sp_rodent.*
- 12: sp_virus.*
- 13: sp_vertibrate.*
- 14: sp_unclassified.*
- 15: sp_rvirus.*
- 16: sp_bacteriap.*
- 17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	127	67.6	66	5 Q9N633	Q9N633 conus catus
2	127	67.6	66	5 Q9NCW6	Q9NCW6 conus catus
3	127	67.6	66	5 Q9NCW5	Q9NCW5 conus catus
4	127	67.6	66	5 Q9NCW3	Q9NCW3 conus catus
5	120	63.8	66	5 Q9NCW4	Q9NCW4 conus catus
6	120	63.8	66	5 Q9NCV5	Q9NCV5 conus catus
7	117	62.2	66	5 Q9NCV7	Q9NCV7 conus catus
8	116	61.7	66	5 Q9N6N6	Q9N6N6 conus catus
9	116	61.7	66	5 Q9NCV4	Q9NCV4 conus catus
10	116	61.7	66	5 Q9NCV0	Q9NCV0 conus catus
11	116	61.7	66	5 Q9NCU1	Q9NCU1 conus catus
12	115	61.2	66	5 Q9N628	Q9N628 conus catus
13	115	61.2	66	5 Q9N625	Q9N625 conus catus
14	115	61.2	66	5 Q9NCW2	Q9NCW2 conus catus
15	115	61.2	66	5 Q9NCV3	Q9NCV3 conus catus
16	115	61.2	66	5 Q9NCV2	Q9NCV2 conus catus

17	115	61.2	66	5 Q9NCV1	Q9NCV1 conus stria
18	114	60.6	66	5 Q9N6F7	Q9N6F7 conus catus
19	114	60.6	66	5 Q9NCW1	Q9NCW1 conus catus
20	104	55.3	66	5 Q9N6F8	Q9N6F8 conus catus
21	104	55.3	66	5 Q9NCW0	Q9NCW0 conus catus
22	104	55.3	66	5 Q9NCV9	Q9NCV9 conus catus
23	103	54.8	66	5 Q9NCV6	Q9NCV6 conus catus
24	95	50.5	66	5 Q9NCV8	Q9NCV8 conus catus
25	69.5	37.0	57	5 Q9N9H2	Q9N9H2 venerupis (
26	69.5	37.0	57	5 Q9N9H1	Q9N9H1 ruditapes d
27	69.5	37.0	107	5 Q9N619	Q9N619 crassostrea
28	66.5	35.4	75	5 Q9U1N5	Q9U1N5 crassostrea
29	65.5	34.8	80	5 Q9BIV4	Q9BIV4 crassostrea
30	60	31.9	81	5 Q9BP83	Q9BP83 conus arena
31	59	31.4	78	5 Q9U656	Q9U656 conus texti
32	59	31.4	686	5 Q94316	Q94316 caenorhabdi
33	59	31.4	1486	4 Q14637	Q14637 homo sapien
34	58	30.9	70	5 Q967T9	Q967T9 anadara gra
35	58	30.9	78	5 Q9U655	Q9U655 conus texti
36	58	30.9	318	10 Q9SB60	Q9SB60 arabidopsis
37	58	30.9	541	4 Q9H6L0	Q9H6L0 homo sapien
38	57.5	30.6	50	12 Q8QLC7	Q8QLC7 mamestra co
39	57	30.3	67	5 Q9N604	Q9N604 conus stria
40	57	30.3	67	5 Q9NCU6	Q9NCU6 conus stria
41	57	30.3	67	5 Q9NCU3	Q9NCU3 conus stria
42	57	30.3	67	5 Q9NCU2	Q9NCU2 conus stria
43	57	30.3	1952	5 Q95SN5	Q95SN5 drosophila
44	57	30.3	4547	5 Q9W343	Q9W343 drosophila
45	56	29.8	67	5 Q9NCU5	Q9NCU5 conus stria

ALIGNMENTS

RESULT 1				
Q9N633	PRELIMINARY;	PRT;	66	AA.
ID	Q9N633			
AC	Q9N633:			
DT	01-OCT-2000 (TrEMBLrel. 15, Created)			
DT	01-OCT-2000 (TrEMBLrel. 15, Last sequence update)			
DE	01-JUN-2002 (TrEMBLrel. 21, Last annotation update)			
DE	Four-loop conotoxin precursor (Fragment).			
OS	Conus catus.			
OC	Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;			
OC	Neogastropoda; Conoidea; Conidae; Conus.			
OX	NCBI_TaxID=101291;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	STRAIN=CCATH_11_6, CCATH_11_1, AND CCATH_11_2;			
RA	Duda T.F., Palumbi S.R.;			
RT	"Molecular evolution of four-loop conotoxin precursors from fish-eating Conus."			
RL	Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.			
DR	EMBL; AF174219; AAF89883.1; -			
DR	EMBL; AF174214; AAF89878.1; -			
DR	EMBL; AF174215; AAF89879.1; -			
DR	HSSP; P05484; IMV1.			
DR	InterPro; IPR004214; Conotoxin.			
DR	Pfam; PF02950; Conotoxin; 1.			
FT	NON_TER 1			
SQ	SEQUENCE 66 AA; 7053 MW; E445338A6968A1AC CRC64;			
Query Match 67.6%; Score 127; DB 5; Length 66;				
Best Local Similarity 80.0%; Pred. No. 1.5e-10;				
Matches 20; Conservative 1; Mismatches 4; Indels 0; Gaps 0;				
QY	5	CKGKGAKCSRLMYDCTGSCRSKGC	29	
Db	41	CKGKGACRRTSYDCTGSCRSKRC	65	
RESULT 2				
Q9NCW6				

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ID Q9NCW6 PRELIMINARY; PRT; 66 AA.
AC Q9NCW6;
DT 01-OCT-2000 (TReMBLrel. 15, Created)
DT 01-OCT-2000 (TReMBLrel. 15, Last sequence update)
DT 01-OCT-2000 (TReMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
OS Conus catus.
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=101291;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=CCATH_11_3;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174216; AAF89880.1; -.
DR HSSP; P05484; 1MVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 7023 MW; E445339B6968B0AC CRC64;

Query Match 67.6%; Score 127; DB 5; Length 66;
Best Local Similarity 80.0%; Pred. No. 1.5e-10;
Matches 20; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 5 CKGKGAKSRLMYDCCCTGSCRSKGC 29
||||| | | | | | | | | | | | | | | | | |
Db 41 CKGKGASCRRTSYDCCCTGSCRSKGC 65

RESULT 3
Q9NCW5 PRELIMINARY; PRT; 66 AA.
AC Q9NCW5;
DT 01-OCT-2000 (TReMBLrel. 15, Created)
DT 01-OCT-2000 (TReMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
OS Conus catus.
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=101291;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=CCATH_11_4;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174217; AAF89881.1; -.
DR HSSP; P05484; 1MVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 7083 MW; E445338A7939E4A8 CRC64;

Query Match 67.6%; Score 127; DB 5; Length 66;
Best Local Similarity 80.0%; Pred. No. 1.5e-10;
Matches 20; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 5 CKGKGAKSRLMYDCCCTGSCRSKGC 29
||||| | | | | | | | | | | | | | | | | |
Db 41 CKGKGASCRRTSYDCCCTGSCRSKGC 65

RESULT 4
Q9NCW3 PRELIMINARY; PRT; 66 AA.
AC Q9NCW3;
DT 01-OCT-2000 (TReMBLrel. 15, Created)
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DT 01-OCT-2000 (TReMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
OS Conus catus.
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=101291;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=CCATH_11_7;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174220; AAF89884.1; -.
DR HSSP; P05484; 1MVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 7054 MW; E9FB5E310968A1AC CRC64;

Query Match 67.6%; Score 127; DB 5; Length 66;
Best Local Similarity 80.0%; Pred. No. 1.5e-10;
Matches 20; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 5 CKGKGAKSRLMYDCCCTGSCRSKGC 29
||||| | | | | | | | | | | | | | | | | |
Db 41 CKGKGASCRRTSYDCCCTGSCRSKGC 65

RESULT 5
Q9NCW4 PRELIMINARY; PRT; 66 AA.
AC Q9NCW4;
DT 01-OCT-2000 (TReMBLrel. 15, Created)
DT 01-OCT-2000 (TReMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
OS Conus catus.
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=101291;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=CCATH_11_5;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174218; AAF89882.1; -.
DR HSSP; P05484; 1MVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 6995 MW; E445338A6AA7A1AC CRC64;

Query Match 63.8%; Score 120; DB 5; Length 66;
Best Local Similarity 76.0%; Pred. No. 1.4e-09;
Matches 19; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

QY 5 CKGKGAKSRLMYDCCCTGSCRSKGC 29
||||| | | | | | | | | | | | | | | | | |
Db 41 CKGKGASCRRTSYDCCCTGSCRSKGC 65

RESULT 6
Q9NCV5 PRELIMINARY; PRT; 66 AA.
AC Q9NCV5;
DT 01-OCT-2000 (TReMBLrel. 15, Created)
DT 01-OCT-2000 (TReMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
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Q9NCV0	Q9NCV0	PRELIMINARY;	PRT;	56 AA.
ID	Q9NCV0			
AC	Q9NCV0;			
DT	01-OCT-2000	(TReMBLrel. 15, Created)		
DT	01-OCT-2000	(TReMBLrel. 15, Last sequence update)		
DT	01-JUN-2002	(TReMBLrel. 21, Last annotation update)		
DE	Four-loop conotoxin (Fragment).			
OS	Conus striatus (Striated cone).			
OS	Conus striatus (Striated cone).			
OC	Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;			
OC	Neogastropoda; Conoidea; Conidae; Conus.			
OX	NCBI_TaxID=6493;			
RN	[1]			

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RP SEQUENCE FROM N.A.
RC STRAIN-CSTRH_1.7;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174246; AAF89910.1; -.
DR HSSP; P05484; IMVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 6981 MW; 20CDC33D7CA7DA05 CRC64;

Query Match 61.7%; Score 116; DB 5; Length 66;
Best Local Similarity 72.0%; Pred. No. 5.1e-09;
Matches 18; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

Qy 5 CKGKGAKSRLMYDCTGSCRSRGC 29
|| | ||| :|||||||
Db 41 CKAAGKSCSRIAYNCTGSCRSRGC 65

RESULT 11
Q9NCU1 PRELIMINARY; PRT; 66 AA.
AC Q9NCU1;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
OS Conus striatus (Striated cone).
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=6493;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-CSTRH_R.1;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174267; AAF89931.1; -.
DR HSSP; P05484; IMVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 6951 MW; 0D9868C0A7A1A39F CRC64;

Query Match 61.7%; Score 116; DB 5; Length 66;
Best Local Similarity 72.0%; Pred. No. 5.1e-09;
Matches 18; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

Qy 5 CKGKGAKSRLMYDCTGSCRSRGC 29
|| | ||| :|||||||
Db 41 CKAAGKSCSRIAYNCTGSCRSRGC 65

RESULT 12
Q9NG28 PRELIMINARY; PRT; 66 AA.
AC Q9NG28;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Four-loop conotoxin precursor (Fragment).
OS Conus catulus.
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=101291;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-CCATH_III_9, AND CCATH_III_6;
RA Duda T.F., Palumbi S.R.;
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RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174229; AAF89893.1; -.
DR EMBL; AF174226; AAF89890.1; -.
DR HSSP; P05484; IMVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 7057 MW; E7AA5E310968B7DA CRC64;

Query Match 61.2%; Score 115; DB 5; Length 66;
Best Local Similarity 72.0%; Pred. No. 7e-09;
Matches 18; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy 5 CKGKGAKSRLMYDCTGSCRSRGC 29
|| | ||| :|||||||
Db 41 CKSTGASCRRTSYDCTGSCRSRGC 65

RESULT 13
Q9N625 PRELIMINARY; PRT; 66 AA.
AC Q9N625;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Four-loop conotoxin precursor (Fragment).
OS Conus catulus.
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=101291;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-VAIROUS STRAINS;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174228; AAF89892.1; -.
DR EMBL; AF174221; AAF89885.1; -.
DR EMBL; AF174222; AAF89886.1; -.
DR EMBL; AF174224; AAF89888.1; -.
DR EMBL; AF174225; AAF89889.1; -.
DR HSSP; P05484; IMVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 7056 MW; EAll338A6968B7DA CRC64;

Query Match 61.2%; Score 115; DB 5; Length 66;
Best Local Similarity 72.0%; Pred. No. 7e-09;
Matches 18; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

Qy 5 CKGKGAKSRLMYDCTGSCRSRGC 29
|| | ||| :|||||||
Db 41 CKSTGASCRRTSYDCTGSCRSRGC 65

RESULT 14
Q9NCW2 PRELIMINARY; PRT; 66 AA.
AC Q9NCW2;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
OS Conus catulus.
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=101291;
RN [1]
RP SEQUENCE FROM N.A.
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RC STRAIN=CCATH_111_3;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
   eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174223; AAF89887.1; -.
DR HSSP; P05484; IMVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 7026 MW; EA11339E382DB7DA CRC64;

Query Match 61.2%; Score 115; DB 5; Length 66;
Best Local Similarity 72.0%; Pred. No. 7e-09;
Matches 18; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

QY 5 CKGKGAKCSRLMYDCTGSCRSKGC 29
DB 41 CKSTGASCRRTSYDCTGSCRSKGC 65

RESULT 15
Q9NCV3
ID Q9NCV3 PRELIMINARY; PRT; 66 AA.
AC Q9NCV3;
DT 01-OCT-2000 (Tremblrel. 15, Created)
DT 01-OCT-2000 (Tremblrel. 15, Last sequence update)
DT 01-JUN-2002 (Tremblrel. 21, Last annotation update)
DE Four-loop conotoxin (Fragment).
OS Conus striatus (Striated cone).
OC Eukaryota; Metazoa; Mollusca; Gastropoda; Caenogastropoda;
OC Neogastropoda; Conoidea; Conidae; Conus.
OX NCBI_TaxID=6493;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=CSTRH_1_3;
RA Duda T.F., Palumbi S.R.;
RT "Molecular evolution of four-loop conotoxin precursors from fish-
   eating Conus.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF174242; AAF89906.1; -.
DR HSSP; P05484; IMVI.
DR InterPro; IPR004214; Conotoxin.
DR Pfam; PF02950; Conotoxin; 1.
FT NON_TER 1
SQ SEQUENCE 66 AA; 7019 MW; 89B89B7AF1A7C7B3 CRC64;

Query Match 61.2%; Score 115; DB 5; Length 66;
Best Local Similarity 72.0%; Pred. No. 7e-09;
Matches 18; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

QY 5 CKGKGAKCSRLMYDCTGSCRSKGC 29
DB 41 CRAAGKPCSRRIAYNCTGSCRSKGC 65
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Search completed: March 17, 2003, 07:26:22
Job time : 29.0916 secs

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